

SUMMARY OF DROUGHT RECOMMENDATIONS FROM DWR (2000 AND 2008) AND GOVERNOR'S ADVISORY PANEL (2000)

[AS SUBMITTED TO THE BLUE RIBBON TASK FORCE ON JUNE 26, 2008]

The following pages are a summary of recommendations on drought actions that should be undertaken by the State (and State agencies) when preparing for droughts or managing during a multi-year drought. This summary was prepared as an advisory to the Blue Ribbon Task Force in relation to Agenda Item 6 - *Current and Near-Term Export Water Supply Conditions and Strategies*.

The following recommendations are divided into two categories—those dealing with general drought preparedness, and those intended to be implemented when dry conditions are being experienced. Implementation of this latter category of recommendations would be triggered in a dry year, with the intent of preparing for a second consecutive dry year. These recommendations were obtained from three sources: (1) *Preparing for California's Next Drought – Changes Since 1987-1992*, Department of Water Resources, July 2000 (Changes); (2) *Critical Water Shortage Contingency Plan*, Governor's Advisory Drought Planning Panel, December 2000 (GADPP); and (3) *California Drought, An Update*, Department of Water Resources, April 2008 (2008 Update). (All recommendations are from the *Changes*, unless otherwise noted.)

LONG-TERM DROUGHT PREPAREDNESS PLANNING

1. Begin conceptual development of multi-year SWP and CVP operations strategies.
2. Seek additional funding or partnerships to support the Department's basic water measurement programs — stream gauging and groundwater level measurement. .
3. Closely review the water shortage contingency elements of the urban water management plans, and work with the water suppliers to develop improvements.
4. Continue efforts to site more California Irrigation Management System weather stations in urban areas, in coordination with the California Urban Water Conservation Council.
5. Determine whether water purveyors are implementing the Model Water Efficient Landscape Ordinance, and whether it is effective in reducing landscape water use as compared to pre-1992 conditions.
6. Identify and fund research in the areas of long-range weather forecasting, global climate change, and paleoclimatology. (2008 Update) Since publishing the 2000 Report, the

Department has made a preliminary quantitative estimate of climate change impacts on SWP and CVP deliveries, as described in the Department's report, *Progress on Incorporating Climate Change into Management of California's Water Resources (DWR, 2006)*. Information gaps/action items identified in a Department sponsored workshop on climate change research needs include:

- Improve understanding of ENSO events and storm tracks, especially as they affect winter precipitation.
- Reconstruct streamflow and precipitation events to illuminate past hydroclimate variability.
- Fill in gaps in hydrologic monitoring, especially for high elevation snowpack.
- Develop remote sensing applications to provide early warning of drought impacts.
- Compile existing local agency drought watch indices and develop regional hydrologic drought indices for watersheds important to statewide water supply conditions and watersheds supporting significant urban and agricultural development (GADPP)

7. Local Agency Groundwater Programs (GADPP)

- Establish an AB 3030 technical assistance program
- Expand Bulletin 118 and related groundwater data compilation
- Seek appropriations for State General Fund for ongoing data collection and compilation and that DWR publish this information every five years

8. Implement Critical Water Shortage Reduction Marketing Program (CWSRMP), building on experience from DWR's past drought water banks. Use three tier system as conditions advance from wet/average hydrologic conditions to initial and then prolonged drought stages. (GADPP)

- Tier 1: Water shortage preparedness activities undertaken by State and local agencies
 - Develop guidelines/criteria/action plans to prepare for Tier 2 and Tier 3 occurrences.
 - Prepare for regulatory conflicts that would be likely to occur under Tier 2 and Tier 3 conditions.
 - Entities should begin setting aside a reserve fund to cover their participation in the program.
 - Seek General Fund appropriations for preparing a programmatic EIR for CWSRMP, and for DWR to expeditiously begin work on the PEIR.
 - Ensure the tool is not a measure of first resort for water users experiencing shortages, but a tool to be used after water users had already made substantial efforts on their own.

ACTIONS TO BE TAKEN WHEN DRY CONDITIONS OCCUR

State Actions – Early Drought Stages

1. If the early February Sierra Nevada snow survey data and resultant water supply forecasts indicate dry conditions, begin implementing proposed multiyear SWP operations plans.
2. Continue implementation of the CWSRMP (GADPP)
 - Tier 2 – purchasing options and allocating water - would be implemented in the early stages of a hydrologic drought or other critical water shortage.
 - Use two committees: one composed of managers to assist DWR in making near real-time decisions associated with physical operations of a water purchasing program, and a broadly based stakeholder committee that would make recommendations on a potential purchaser's eligibility.
 - Local agencies must declare impending shortage (assuming no program purchase), and demonstrate maximum use of their water to be **eligible** to purchase water
 - Eligibility would require purchasers to demonstrate they have made a responsible effort to use their existing supplies efficiently, by taking steps to prepare for critical shortages, and implement measures that either comply with AB 3616 for agricultural water management plans or applicable Urban Water Conservation Council BMPs OR their functional equivalent
 - Purchase conditions should include paying for water at a price that covers program implementation, including mitigation
 - CWSRMP should focus on inter-program coordination, including acquisition and wheeling aspects
 - The priority of water allocations should favor those participants having the greatest need, and recognize that certain agencies will experience special problems if the agency has little ability to negotiate its own water purchase and conveyance agreements
 - Examine and propose a range of hierarchical techniques to avoid or mitigate third-party impacts
 - Perform a review after the second year of the program

State Actions – Later Drought Stages

1. After reviewing the contractors' preliminary delivery requests and current water supply conditions and Delta conveyance restrictions, make a tentative selection of operational strategies.
2. Continue implementation of the CWSRMP (GADPP)

- Tier 3 would be triggered by a declaration of emergency by a water agency pursuant to Water Code Section 350, by a city or county, or by the Governor.
 - Extraordinary measures to protect public health and safety.
 - State financial assistance to small water systems for emergency water acquisitions, including water hauling, pipeline construction, or well drilling.
- 3. Evaluate the need to increase the frequency or extent of subsidence monitoring along the California Aqueduct, in expectation of increased groundwater extraction by local water users.

Local Assistance Actions – Early Drought Stages

1. In January of the first year, submit a request for funding in the Governor’s May budget revision for the coming fiscal year, to update the programmatic EIR for the drought water bank. If the water year continues to be dry, work on a new EIR could then begin in July.
2. In January of the first year, submit a funding request in the Governor’s May budget revision to begin placing additional mobile irrigation management labs in the field.
3. Begin developing fact sheets and related information to facilitate responding to public and news media inquiries about dry conditions.
4. Assistance to Small Water Systems and Homeowners in Rural Counties
 - Develop technical assistance and education for rural homeowners and small domestic systems relying on self-supplied groundwater
 - Provide \$1.5 million in State General Fund support for this program
 - Use a series of workshops to educate homeowners with private wells about well construction and maintenance fundamentals
 - Develop a web site regarding county well construction requirements
 - Pursue adoption of legislation that would require sellers of single-family homes served by wells to identify the water source and potential causes of shortages

Local Assistance Actions – Later Drought Stages

1. Evaluate water supply conditions and define trigger levels for drought response, such as public education and media outreach or opening a drought water bank.
2. Begin increasing local assistance efforts, such as holding leak detection workshops for local agencies and making mobile lab irrigation system evaluations accessible.
3. For Department-operated Sacramento River flood control facilities, schedule major maintenance activities that would be facilitated by dry conditions.